

REMARKS

The Examiner has rejected claims 1 - 5 under 35 USC 102(e) as being anticipated by US 6 604 494.

US 6 604 494 (M.J. Skryzpchak et al.) discloses an electronic control unit 100 for an internal combustion engine 101 having a water cooler arrangement 134 arranged in heat transfer relationship with the electronic control unit 100 for removing heat from the control unit 100. The water cooler 134 is a coolant tube which extends along the electronic control unit 100 in close contact therewith for the transfer of heat from the electronic control unit 100 to the cooling water tube 134. The cooling water tube 134 is connected to a pump 279 and receives fresh water from the environment through an inlet line 293 and pumps the fresh water through an outlet 294 and then through a coolant supply line 296 (not marked in Fig. 17) to the inlet 136 of the water cooler 134 and out of the outlet 138 and then via a drain line 300 back to the environment, (see Col. 8, lines 41 - 51).

In contrast, in the arrangement according to the invention as defined in amended claim 1, the power electronic unit 1 is supported on a carrier 2, 3, which is mounted on an engine housing 10 and includes a cooler 2; the carrier 2, 3 having a support surface with coolant inlets and outlets 4 and being mounted directly on the engine such that the coolant inlets and outlets 4 in the support surface are in direct communication with coolant passages 11 of a cooling circuit of the internal combustion engine 10.

Clearly, such an arrangement is not disclosed in the cited reference. The cited reference does not disclose that an electronic control unit is mounted onto a carrier which forms a cooler with coolant inlets and outlets and which is directly mounted onto an engine housing such that the coolant inlets and outlets are in direct communication with coolant passages of the engine so as to be cooled directly by the engine coolant.

Rather, the cited reference discloses a separate cooling circuit for the electronic control unit which is supplied with separate cooling water through coolant pipes or hoses.

Consequently, the arrangement as defined in claim 1 is clearly novel based on the references cited by the Examiner. Reconsideration of claim 1 as amended is therefore respectfully requested.

However, claim 1 is not only novel, it is also unobvious as the features of the present invention, as pointed out above, are not present in, or in any way suggested by, US patent 6 604 494.

Claim 2 defines that the carrier 2, 3 is mounted onto the engine block.

Claim 3 defines that seals are provided between the carrier and the engine block.

Claim 4 defines that the carrier (2, 3) includes a cooler (2) and an adapter plate (3) with coolant inlets and outlets arranged so as to fit coolant passages of a particular internal combustion engine (whereby the arrangement can be adapted to different engines), and

Claim 5 states that the electronic power unit is an electric machine which can be operated selectively as a starter and a generator.

Most of the features of the dependent claims 2 to 5 are not disclosed in the reference cited by the Examiner. But, in any case, these features are considered to be particularly advantageous in connection with the arrangement as claimed in claim 1; and since claims 2 to 5 are all directly or indirectly dependent on claim 1, they include all the features of claim 1 and should therefore be patentable already for that reason.

Reconsideration also of claims 2 to 5 is respectfully requested and allowance of claims 1 to 5 is solicited.

Respectfully submitted,



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